Step 2: Estimate Changes due to New Policy

This section quantifies the number of additional households that would become eligible for Lifeline, the number of households that would subscribe to Lifeline, and the number of additional households that would subscribe to telephone service due to the nationwide implementation of a 1.50 PGC. (This analysis assumes that states without a PGC for Lifeline and states with a PGC below 1.50 adopt a 1.50 PGC.) This section then calculates the increased federal Lifeline expenditures resulting from the increased number of households taking Lifeline due to the 1.50 PGC. CPSH data are used to determine the number of additional households that would become eligible for Lifeline. Two regression analyses are used to determine the number of additional households that would subscribe to Lifeline and the number of households that would take telephone service due to a 1.50 PGC.

Change to Lifeline eligibility in 2002 and 2005 resulting from a 1.50 PGC. We predict that an additional 8.7 percent of total households would qualify for Lifeline under the 1.50 PGC, and this would qualify an additional 10.4 million households in 2005.

The demographic data from each household in 2002 CPSH data are examined to determine eligibility with and without a 1.50 PGC. For 2002, the number of households that would have become eligible with a 1.50 PGC is calculated. These estimates are then used to determine the number of households that would become eligible for Lifeline with a 1.50 PGC in 2005. Table 2.A presents the information for 2002 and 2.B presents the information for the Year 2005.

Change to Lifeline eligibility in 2002 and 2005 resulting from a 1.50 PGC. We predict that an additional 6.7 percent of total households would qualify for Lifeline under the 1.50 PGC. This translates into 7.4 million households in 2002 and 8.1 million households in 2005.

The demographic data from each household in the CPSH data are examined to determine whether it was eligible for Lifeline in 2002 under existing rules, and whether it would have become eligible for Lifeline with a 1.50 PGC. This allows us to estimate the increase in Lifeline eligibility that results from a 1.50 PGC for 2002, which in turn, allows us to estimate the effects for 2005. Table 2.A presents the information for 2002 and 2.B presents the information for 2005.

Change to Lifeline subscribership in 2002 and 2005 resulting from a 1.50 PGC. We predict that if states without a PGC (and states with PGCs at 1.33 or lower) adopted a 1.50 PGC, there would be a significant increase in the number of low-income households that would take Lifeline. Nationwide, for 2002, the number of additional Lifeline takers would be between 2.67 million and 2.94 million. For 2005, the number of additional Lifeline subscribers would be between 2.91 million and 3.22 million.

Change to federal Lifeline expenditures for 2005 is forecasted. We predict that federal Lifeline expenditures would increase by $316 million to $348 million if all states implemented a 1.50 PGC.

The forecasted change to federal Lifeline expenditures is calculated by multiplying the forecasted increase in the number of Lifeline subscribers in each state by the expected federal

expenditures per Lifeline subscriber in that state. The sum of state-by-state changes in the amount of federal expenditures forms the national total. (*See* Table 2.G).

Forecasted change to telephone subscribership for 2005. Unlike the regression model predicting the increase in Lifeline subscribership, the results from the model predicting the increase in telephone subscribership cannot be directly used to estimate increased telephone subscribership with a 1.50 PGC. The model must be rerun with slightly different variables.

If a 1.50 PGC will increase telephone subscribership more than a 1.35 PGC, then it must do so for those households with incomes between 1.35 and 1.50 times the FPG. This study therefore examines whether households in that income range are more likely to take telephone service if they are in a state with a 1.50 PGC. This study uses the same methodology as is used in the preceding section. There are only three differences between this model and the one in the preceding section. First, the sample for this study is those households with incomes between 1.35 and 1.50 times the FPG.[11] Second, the variable "State has 1.50 poverty guidelines criterion" was used in lieu of "state has 1.33 or higher poverty guidelines criterion for Lifeline." Third, some variables were excluded from this model. The eligibility variables were excluded because, as a whole, they were not statistically significant. The California variable was also excluded because the variable of interest, "State has 1.50 poverty guidelines criterion," was negative when the variable "California" was included. As that result is implausible, the variable "California" was omitted.[12]

Table 2.H shows the results of the model. The variable "State has 1.50 poverty guidelines criterion for Lifeline" is not significant. This suggests that raising the PGC criterion from 1.35 to 1.50 would not result in a statistically significant increase in the number of households that take telephone service. This result is somewhat surprising. A 1.50 FPG lowers the cost of telephone service to these households, so logically, more of these households should take telephone service. The result suggests that the number of these households with incomes between 1.35 and 1.50 times the FPG that would newly take telephone service because of the new availability of Lifeline is too small to be measured.

Because the logit-regression model indicates that no additional households would newly take telephone service due to a wide-spread adoption of a 1.50 PGC, Tables 2.I and 2.J, which would calculate the number of additional households taking telephone service due to the change, were not computed.

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[11] The model in the preceding section used households with incomes below 1.35 times the FPG.

[12] The variable "California" was significant, however, so a strong case could be made not to drop it. Because neither specification produced a positive and statistically significant result on the variable "State has a 1.50 PGC", the issue is essentially moot. The only reason it is not entirely moot is that some might be inclined to attempt to use the coefficient on "State has a 1.50 PGC" as a best guess to calculate the number of additional households that might take telephone service with a 1.50 PGC. This would be incorrect, because when the variable "California" is included the coefficient on "State has a 1.50 PGC" is negative, another indication that there is no benefit to a 1.50 PGC over a 1.35 PGC.

Step 3: Apply Changes to Baselines to Compute New Program Levels

The new levels of Lifeline subscribership and federal expenditures are shown in two tables. First, the new total of Lifeline subscribers is calculated, and then the increased federal Lifeline expenditures are calculated.

Forecasted New Policy Levels for Lifeline subscribership in 2005. We predict that if all states implement a 1.50 PGC for Lifeline, an estimated 10 million households would subscribe to Lifeline.

Here the forecasted increase in Lifeline subscribers is added to the forecasted baseline number of subscribers to create the new forecasted number of Lifeline subscribers in 2005 with the 1.35 PGC. (*See* Table 3.A).

Forecasted New Policy Levels for federal Lifeline expenditures. We predict that if all states implement a 1.50 PGC for Lifeline, federal Lifeline expenditures are forecasted to be in the range of $1.02 billion to $1.05 billion.

Here the forecasted increase in federal Lifeline expenditures is added to the forecasted baseline federal Lifeline expenditures to create the new forecasted federal Lifeline expenditures in 2005 with the 1.50 PGC. (*See* Table 3.B).

Section 1: Baseline Information
Table 1.A
Baseline Lifeline subscription information (Year 2002)

State	a (CPSH data) Households in 2002	b (CPSH data) Percentage of HH that would qualify for Lifeline (LL) under existing rules	c=a*b Households that would qualify for Lifeline under existing rules	d (USAC data) Households that took Lifeline in 2002	e=d/c Percentage of households that took Lifeline in 2002
Alabama	1,752,018	17 0%	297,228	25,403	8.5%
Alaska	224,499	23 2%	52,146	23,302	44 7%
Arizona	1,939,473	14 4%	279,334	73,186	26 2%
Arkansas	1,059,049	23 0%	243,997	10,100	4.1%
California	11,935,960	20 5%	2,451,057	3,232,732	131.9%
Colorado	1,690,526	2.7%	45,808	29,709	64 9%
Connecticut	1,381,915	13 7%	188,857	58,056	30 7%
Delaware	310,968	10 9%	33,946	2,100	6.2%
DC	2~ ^56	23 5%	63,327	13,645	21.5%
Florida	6,. o18	15.8%	1,052,902	142,521	13 5%
Georgia	3,1.2,213	14.3%	452,827	68,266	15 1%
Hawaii	418,526	8 6%	36,185	14,124	39 0%
Idaho	495,397	25 3%	125,089	27,660	22.1%
Illinois	4,836,881	16.4%	793,394	87,188	11 0%
Indiana	2,501,325	12.4%	309,568	40,326	13 0%
Iowa	1,163,128	14 6%	170,241	17,800	10.5%
Kansas	1,088,752	12 3%	133,747	13,775	10.3%
Kentucky	1,583,371	21.0%	332,295	60,739	18.3%
Louisiana	1,668,964	17 2%	287,759	21,265	7 4%
Maine	571,277	22 5%	128,698	85,587	66.5%
Maryland	2,083,956	2.8%	57,849	4,022	7 0%
Massachusetts	2,584,626	16 4%	423,706	164,600	38.8%
Michigan	3,947,084	26.2%	1,032,526	118,794	11.5%
Minnesota	1,994,754	14 0%	278,453	47,554	17.1%
Mississippi	1,097,592	29 7%	326,524	22,566	6 9%
Missouri	2,217,997	14 6%	324,392	33,322	10.3%
Montana	379,228	14 2%	53,704	15,815	29.4%
Nebraska	678,736	13 1%	89,251	15,241	17.1%
Nevada	809,411	19 8%	160,611	37,204	23.2%
New Hampshire	523,968	12 3%	64,338	7,253	11.3%
New Jersey	3,262,561	13 3%	435,283	46,687	10.7%
New Mexico	698,282	21 7%	151,749	47,356	31.2%
New York	7,294,127	21 6%	1,578,737	500,671	31 7%
North Carolina	3,217,678	19.2%	616,817	99,510	16 1%
North Dakota	275,725	13 7%	37,712	19,226	51.0%
Ohio	4,595,674	15 8%	726,907	279,591	38.5%
Oklahoma	1,366,274	17 7%	241,259	117,297	48 6%
Oregon	1,366,819	25.0%	341,162	36,402	10 7%
Pennsylvania	4,863,997	12.0%	584,754	94,846	16.2%
Rhode Island	428,672	18.2%	78,185	46,189	59.1%
South Carolina	1,574,457	18 4%	289,051	21,809	7 5%
South Dakota	308,026	17.6%	54,211	27,117	50.0%
Tennessee	2,307,548	33 1%	764,595	49,050	6 4%
Texas	7,493,242	25 4%	1,901,378	429,970	22.6%
Utah	716,224	22.2%	159,072	19,652	12 4%
Vermont	259,765	32 9%	85,439	29,911	35 0%
Virginia	2,759,677	11 3%	312,574	20,730	6.6%
Washington	2,397,497	16 4%	393,513	83,327	21 2%
West Virginia	759,332	19 8%	150,381	4,905	3.3%
Wisconsin	2,181,649	11 5%	250,155	68,333	27.3%
Wyoming	196,973	15 0%	29,449	2,126	7.2%
Nationwide	109,388,768	17 8%	19,472,000	6,558,560	33.7%

Note Some numbers in this table have been rounded
Source Current Population Survey of Households (CPSH) March 2002 data

Section 1: Baseline Information
Table 1.B
Baseline Lifeline subscription information (Year 2005)

State	a (Table 1 A) Households 2002	b (CPSH) Growth (loss) 1/2002 - 7/2005 based on 1/2000 - 1/2002[1]	c=a*b New (fewer) households in 2005	d=a+c Expected total households July 2005	e (Table 1 A) Percentage of HH that would qualify for LL under existing rules	f=d*e Households that would qualify for Lifeline under existing rules	g (Table 1 A) Lifeline take rate for HH that qualify under existing rules	h=f*g Expected HH that would take Lifeline under existing rules
Alabama	1,752,018	0.8%	14,849	1,766,868	17 0%	299,747	8.5%	25,618
Alaska	224,499	5.4%	12,185	236,684	23 2%	54,977	44 7%	24,567
Arizona	1,939,473	12 7%	246,506	2,185,979	14 4%	314,837	26 2%	82,488
Arkansas	1,059,049	5.5%	58,199	1,117,248	23 0%	257,406	4.1%	10,655
California	11,935,960	-2 2%	-259,963	11,675,997	20 5%	2,397,673	131.9%	3,162,324
Colorado	1,690,526	9.6%	162,683	1,853,209	2 7%	50,216	64 9%	32,568
Connecticut	1,381,915	12 9%	178,850	1,560,766	13 7%	213,300	30 7%	65,570
Delaware	310,968	13 8%	42,992	353,960	10 9%	38,639	6 2%	2,390
DC	269,356	21 9%	59,075	328,431	23.5%	77,216	21.5%	16,638
Florida	6,683,618	17 8%	1,191,839	7,875,457	15 8%	1,240,658	13.5%	167,936
Georgia	3,172,213	13 1%	416,286	3,588,499	14 3%	512,251	15.1%	77,224
Hawaii	418,526	2 9%	12,305	430,831	8 6%	37,249	39 0%	14,539
Idaho	495,397	5 2%	25,673	521,070	25.3%	131,572	22.1%	29,093
Illinois	4,836,881	10.0%	485,999	5,322,880	16.4%	873,112	11.0%	95,948
Indiana	2,501,325	15 2%	380,568	2,881,893	12.4%	356,667	13 0%	46,461
Iowa	1,163,128	2.2%	25,853	1,188,981	14 6%	174,025	10.5%	18,196
Kansas	1,088,752	7 4%	80,504	1,169,256	12.3%	143,636	10.3%	14,794
Kentucky	1,583,371	3.9%	61,169	1,644,539	21 0%	345,132	18 3%	63,085
Louisiana	1,668,964	6.5%	108,680	1,777,645	17 2%	306,498	7 4%	22,650
Maine	571,277	26 1%	149,312	720,589	22 5%	162,335	66.5%	107,956
Maryland	2,083,956	8.4%	174,235	2,258,191	2 8%	62,685	7 0%	4,358
Massachusetts	2,584,626	8 4%	217,343	2,801,968	16 4%	459,336	38.8%	178,441
Michigan	3,947,084	11 1%	439,803	4,386,888	26.2%	1,147,575	11.5%	132,031
Minnesota	1,994,754	13.8%	275,225	2,269,978	14.0%	316,872	17 1%	54,115
Mississippi	1,097,592	9 7%	106,991	1,204,582	29.7%	358,353	6.9%	24,766
Missouri	2,217,997	3 8%	84,088	2,302,085	14 6%	336,690	10 3%	34,585
Montana	379,228	10.9%	41,387	420,615	14 2%	59,565	29 4%	17,541
Nebraska	678,736	6.7%	45,409	724,145	13 1%	95,222	17.1%	16,261
Nevada	809,411	32 0%	259,081	1,068,492	19 8%	212,021	23.2%	49,112
New Hampshire	523,968	22 1%	115,836	639,804	12 3%	78,561	11.3%	8,856
New Jersey	3,262,561	12.5%	408,819	3,671,381	13.3%	489,827	10.7%	52,537
New Mexico	698,282	7 7%	54,043	752,325	21.7%	163,494	31.2%	51,021
New York	7,294,127	6 4%	465,077	7,759,204	21.6%	1,679,398	31.7%	532,594
North Carolina	3,217,678	16.0%	513,866	3,731,543	19.2%	715,324	16 1%	115,402
North Dakota	275,725	13.0%	35,890	311,615	13.7%	42,621	51 0%	21,729
Ohio	4,595,674	2 9%	133,391	4,729,065	15.8%	748,006	38.5%	287,706
Oklahoma	1,366,274	4.2%	57,363	1,423,636	17 7%	251,388	48 6%	122,222
Oregon	1,366,819	3.4%	45,970	1,412,789	25 0%	352,636	10.7%	37,626
Pennsylvania	4,863,997	7.4%	357,618	5,221,614	12 0%	627,747	16.2%	101,819
Rhode Island	428,672	18 6%	79,874	508,546	18 2%	92,753	59.1%	54,795
South Carolina	1,574,457	3 5%	54,896	1,629,353	18 4%	299,129	7.5%	22,569
South Dakota	308,026	16 3%	50,279	358,305	17.6%	63,060	50 0%	31,543
Tennessee	2,307,548	13.6%	313,658	2,621,206	33 1%	868,524	6 4%	55,717
Texas	7,493,242	1 3%	100,170	7,593,412	25 4%	1,926,796	22 6%	435,718
Utah	716,224	9 7%	69,218	785,443	22 2%	174,445	12 4%	21,551
Vermont	259,765	14 3%	37,188	296,953	32 9%	97,670	35 0%	34,193
Virginia	2,759,677	7 1%	196,873	2,956,550	11 3%	334,873	6.6%	22,209
Washington	2,397,497	7 0%	168,037	2,565,534	16 4%	421,094	21 2%	89,167
West Virginia	759,332	0 6%	4,808	764,140	19.8%	151,333	3.3%	4,936
Wisconsin	2,181,649	13.3%	289,380	2,471,029	11.5%	283,336	27 3%	77,397
Wyoming	196,973	3 7%	7,223	204,196	15 0%	30,529	7 2%	2,204
Nationwide	109,388,768	7 7%	8,657,000	118,045,768	17 8%	21,013,000	33.7%	6,775,000

[1] 1 75 times the 2-year growth (2000-2002) equals the growth over 3.5 years.

Note Some numbers in this table have been rounded

Source. Current Population Survey of Households (CPSH) March 2000 and 2002 data

Section 1: Baseline Information
Table 1.C
Forecasted baseline Lifeline expenditures (Year 2005)

State	a (staff estimate)[1] Monthly federal support per line in 2005	b=a*12 Annual federal support per line	c (Table 1.B) Expected Households taking Lifeline under existing rules	d=b*c Forecasted Lifeline expenditures under existing rules
Alabama	$10 00	$120 00	25,618	$3,074,197
Alaska	$10 00	$120.00	24,567	$2,948,007
Arizona	$8.31	$99 67	82,488	$8,221,159
Arkansas	$8.25	$99 00	10,655	$1,054,846
California	$8 34	$100.02	3,162,324	$316,308,133
Colorado	$10 00	$120.00	32,568	$3,908,155
Connecticut	$8.02	$96 26	65,570	$6,312,049
Delaware	$8 17	$98 04	2,390	$234,348
DC	$7 32	$87 84	16,638	$1,461,447
Florida	$10 00	$120 00	167,936	$20,152,282
Georgia	$10 00	$120 00	77,224	$9,266,937
Hawaii	$8 25	$99 00	14,539	$1,439,387
Idaho	$9 91	$118 92	29,093	$3,459,726
Illinois	$7.42	$89 01	95,948	$8,540,023
Indiana	$7 45	$89 39	46,461	$4,153,300
Iowa	$6 96	$83 48	18,196	$1,518,973
Kansas	$8 82	$105.87	14,794	$1,566,265
Kentucky	$9 86	$118.29	63,085	$7,462,594
Louisiana	$8.25	$99 00	22,650	$2,242,338
Maine	$9.93	$119.19	107,956	$12,867,569
Maryland	$9 11	$109.33	4,358	$476,493
Massachusetts	$9.92	$119 04	178,441	$21,241,723
Michigan	$8.21	$98 54	132,031	$13,010,610
Minnesota	$7.04	$84 44	54,115	$4,569,718
Mississippi	$10 00	$120.00	24,766	$2,971,882
Missouri	$7 08	$84 97	34,585	$2,938,649
Montana	$10 00	$120 00	17,541	$2,104,915
Nebraska	$9.43	$113.15	16,261	$1,839,924
Nevada	$7.87	$94 49	49,112	$4,640,695
New Hampshire	$8.17	$98.08	8,856	$868,626
New Jersey	$7 95	$95 45	52,537	$5,014,836
New Mexico	$10 00	$120 00	51,021	$6,122,532
New York	$9 83	$117 99	532,594	$62,842,179
North Carolina	$9 72	$116 61	115,402	$13,457,472
North Dakota	$10 00	$120 00	21,729	$2,607,431
Ohio	$7 33	$87 99	287,706	$25,315,775
Oklahoma	$7 78	$93 36	122,222	$11,410,768
Oregon	$10 00	$120 00	37,626	$4,515,156
Pennsylvania	$9 03	$108 32	101,819	$11,028,901
Rhode Island	$9 92	$119 04	54,795	$6,522,833
South Carolina	$9 98	$119 72	22,569	$2,702,025
South Dakota	$8 21	$98 47	31,543	$3,106,151
Tennessee	$9 89	$118 70	55,717	$6,613,430
Texas	$8 90	$106.81	435,718	$46,540,253
Utah	$9 94	$119.22	21,551	$2,569,386
Vermont	$9 93	$119.20	34,193	$4,075,759
Virginia	$9 44	$113.22	22,209	$2,514,557
Washington	$9 62	$115 40	89,167	$10,289,790
West Virginia	$9 25	$111 00	4,936	$547,914
Wisconsin	$7 72	$92 68	77,397	$7,173,137
Wyoming	$10 00	$120 00	2,204	$264,475
Nationwide	Not applicable	Not applicable	6,775,000	$706,000,000

[1] Estimate of monthly federal expenditures includes the Subscriber Line Charge (SLC), $1 75, and any federal matching funds for that state SLC amounts were estimated on a company-by-company basis, and are based on rules established by the CALLS and MAG

Note Some numbers in this table have been rounded

Section 2: Change to baseline: effects from the new policy
Table 2.A
Estimated additional Lifeline-eligible households using a nationwide 1.50 PGC (Year 2002)

State	a (Table 1.A) Households in 2002	b (CPSH data) Additional households that would qualify with a 1.5 PGC	c=b/a Additional households (%) that would qualify with a 1.5 PGC
Alabama	1,752,018	256,491	14.6%
Alaska	224,499	16,090	7 2%
Arizona	1,939,473	235,401	12.1%
Arkansas	1,059,049	154,167	14 6%
California	11,935,960	0	0 0%
Colorado	1,690,526	222,464	13 2%
Connecticut	1,381,915	110,365	8.0%
Delaware	310,968	22,559	7.3%
DC	269,356	0	0.0%
Florida	6,683,618	981,969	14.7%
Georgia	3,172,213	401,966	12.7%
Hawaii	418,526	62,311	14.9%
Idaho	495,397	19,115	3.9%
Illinois	4,836,881	414,479	8.6%
Indiana	2,501,325	334,218	13.4%
Iowa	1,163,128	114,108	9.8%
Kansas	1,088,752	148,384	13.6%
Kentucky	1,583,371	203,808	12.9%
Louisiana	1,668,964	278,378	16 7%
Maine	571,277	58,443	10.2%
Maryland	2,083,956	277,035	13.3%
Massachusetts	2,584,626	272,646	10.5%
Michigan	3,947,084	0	0.0%
Minnesota	1,994,754	137,500	6.9%
Mississippi	1,097,592	178,003	16.2%
Missouri	2,217,997	132,829	6 0%
Montana	379,228	60,091	15 8%
Nebraska	678,736	62,530	9.2%
Nevada	809,411	0	0.0%
New Hampshire	523,968	39,079	7.5%
New Jersey	3,262,561	347,871	10.7%
New Mexico	698,282	101,850	14.6%
New York	7,294,127	831,139	11.4%
North Carolina	3,217,678	425,055	13.2%
North Dakota	275,725	43,283	15 7%
Ohio	4,595,674	429,961	9.4%
Oklahoma	1,366,274	202,226	14.8%
Oregon	1,366,819	29,048	2.1%
Pennsylvania	4,863,997	365,771	7.5%
Rhode Island	428,672	51,691	12.1%
South Carolina	1,574,457	177,234	11.3%
South Dakota	308,026	27,625	9.0%
Tennessee	2,307,548	61,918	2.7%
Texas	7,493,242	364,564	4 9%
Utah	716,224	19,425	2 7%
Vermont	259,765	0	0.0%
Virginia	2,759,677	270,158	9.8%
Washington	2,397,497	236,432	9.9%
West Virginia	759,332	126,545	16 7%
Wisconsin	2,181,649	167,455	7.7%
Wyoming	196,973	21,734	11.0%
Nationwide	109,388,768	9,495,000	8.7%

Note Some numbers in this table have been rounded.

Section 2: Change to baseline: effects from the new policy
Table 2.B
Estimated additional Lifeline-eligible households using a nationwide 1.50 PGC (Year 2005)

State	a (Table 1.B) Forecasted Households in 2005	b (Table 2.A) Additional households (%) that would qualify with a 1.5 PGC	c=a*b Additional households that would qualify with a 1 5 PGC
Alabama	1,766,868	14.6%	258,665
Alaska	236,684	7.2%	16,963
Arizona	2,185,979	12 1%	265,320
Arkansas	1,117,248	14.6%	162,639
California	11,675,997	0.0%	0
Colorado	1,853,209	13.2%	243,872
Connecticut	1,560,766	8 0%	124,648
Delaware	353,960	7 3%	25,677
DC	328,431	0.0%	0
Florida	7,875,457	14 7%	1,157,077
Georgia	3,588,499	12 7%	454,716
Hawaii	430,831	14.9%	64,143
Idaho	521,070	3.9%	20,106
Illinois	5,322,880	8 6%	456,124
Indiana	2,881,893	13.4%	385,069
Iowa	1,188,981	9 8%	116,644
Kansas	1,169,256	13.6%	159,356
Kentucky	1,644,539	12 9%	211,682
Louisiana	1,777,645	16 7%	296,506
Maine	720,589	10.2%	73,718
Maryland	2,258,191	13.3%	300,198
Massachusetts	2,801,968	10.5%	295,573
Michigan	4,386,888	0 0%	0
Minnesota	2,269,978	6 9%	156,472
Mississippi	1,204,582	16.2%	195,354
Missouri	2,302,085	6.0%	137,865
Montana	420,615	15.8%	66,649
Nebraska	724,145	9 2%	66,713
Nevada	1,068,492	0.0%	0
New Hampshire	639,804	7.5%	47,718
New Jersey	3,671,381	10 7%	391,462
New Mexico	752,325	14.6%	109,732
New York	7,759,204	11.4%	884,133
North Carolina	3,731,543	13.2%	492,937
North Dakota	311,615	15.7%	48,917
Ohio	4,729,065	9 4%	442,441
Oklahoma	1,423,636	14.8%	210,716
Oregon	1,412,789	2.1%	30,025
Pennsylvania	5,221,614	7.5%	392,664
Rhode Island	508,546	12.1%	61,322
South Carolina	1,629,353	11.3%	183,413
South Dakota	358,305	9.0%	32,135
Tennessee	2,621,206	2.7%	70,334
Texas	7,593,412	4 9%	369,437
Utah	785,443	2 7%	21,303
Vermont	296,953	0.0%	0
Virginia	2,956,550	9 8%	289,431
Washington	2,565,534	9 9%	253,003
West Virginia	764,140	16.7%	127,347
Wisconsin	2,471,029	7 7%	189,667
Wyoming	204,196	11 0%	22,531
Nationwide	118,045,768	8.7%	10,382,000

Note Some numbers in this table have been rounded.

Section 2: Change to baseline: effects from the new policy
Table 2.C

Regression analysis: Would Lifeline take rates[1] increase due to a nationwide implementation of a 1.50 PGC?

Regression Model

Dependent variable: Lifeline take rate	Specification 1 (Low Range)		Specification 2 (High Range)	
Independent variables	Coefficient	t-statistic	Coefficient	t-statistic
Amount that state's PGC is above 1.25[3]	0.554	1.78	0.612	1.99
California	0.990	5.95	0.992	5.96
Total support	0.010	1.02		
Constant	0.082	0.88	0.173	7.69
Sample size: 51 $R^2 =$	0.5636		0.5539	

Conclusion: Yes, for both specifications, the coefficient on "Amount that state's PGC is above 1.25" is positive and statistically significant.

Result

Q: If a state without a PGC (or a state with a PGC below 1.5) added a 1.5 PGC, how much would the take rate increase?

	Coefficient	Amount 1.5 PGC is above 1.25	Increase in portion that would take Lifeline[4]
Low range:	0.554	0.25	0.139
High range:	0.612	0.25	0.153

A: The take rate would rise by 13.9 to 15.3 percentage points.

Notes:

[1] The Lifeline take rate is the number of households that take Lifeline divided by the number of households with income at or below 1 5 times the poverty guidelines. For more information on the regression, see Technical Appendix 1.

[2] Significant at the 10% level in a two-tailed test.

[3] For instance, if a state has a 1.5 poverty guidelines criterion, then the variable has a value of .25 (=1.5 - 1.25). If a state has no poverty guidelines criteria, or if the state's poverty guidelines criteria is at or below 1.25, then the variable has a value of 0.

[4] This means that if a state raised its PGC from 1.25 to 1.50, then, on average, the percentage of poor households that take Lifeline would rise by 13.9 to 15.3 percentage points. Similarly, on average, a state adding a 1.50 PGC where no PGC existed would increase its Lifeline take rate by 13.9 to 15.3 percentage points.

Section 2: Change to baseline: effects from the new policy
Table 2.D
Estimated additional Lifeline subscribership with a nationwide 1.50 PGC

	a (CPSH data)	b (Table 2.C)	c=a*b
	Households with incomes at or below 1 50 times the poverty guidelines in states with 1.33 or lower PGCs (Year 2002)[1]	Additional households that would take Lifeline due to 1.50 PGC	Additional Lifeline takers due to 1.50 PGC
Low range·	19,232,000	13 9%	2,665,000
High range	19,232,000	15.3%	2,940,000

Q Of the households that would become eligible to take Lifeline because of a 1.5 PGC, what percentage would do so only because of the 1.5 PGC?

	A (Column c, above)	B (Table 2.A)	C=A/B
	Additional households that would have taken Lifeline due to a 1.5 PGC	Additional households that would have become eligible due to a 1.5 PGC	Percentage of newly eligible households that would take Lifeline with a 1.5 PGC
Low range	2,665,000	9,495,000	28.1%
High range:	2,940,000	9,495,000	31.0%

A· 28.1% to 31.0% of the households that would become eligible for Lifeline would subscribe.

Notes
   [1] The regression analysis presented in Table 2.C examined Lifeline take rates among households with incomes at or below 1.5 times the federal poverty guidelines This value includes households in states without a poverty level criterion for Lifeline.

Source: Current Population Survey of Households (CPSH) March 2002 data.

Section 2: Change to baseline: effects from the new policy
Table 2.E
Estimated state-by-state additional Lifeline subscribers using a 1.50 PGC (Year 2002)

State	a (Table 2.A) Additional HH that would qualify if 1.5 PGC were added	Low range b (Table 2 D) Take rate among HH that qualify due to 1.5 PGC	c=a*b Additional LL takers due to 1.5 PGC	High range d (Table 2.D) Take rate among HH that qualify due to 1.5 PGC	e=a*d Additional LL takers due to 1 5 PGC
Alabama	256,491	28 1%	71,990	31 0%	79,419
Alaska	16,090	28 1%	4,516	31 0%	4,982
Arizona	235,401	28 1%	66,071	31 0%	72,889
Arkansas	154,167	28.1%	43,271	31 0%	47,736
California	0	28.1%	0	31.0%	0
Colorado	222,464	28.1%	62,440	31 0%	68,883
Connecticut	110,365	28.1%	30,977	31 0%	34,173
Delaware	22,559	28.1%	6,332	31 0%	6,985
DC	0	28.1%	0	31 0%	0
Florida	981,969	28.1%	275,613	31 0%	304,054
Georgia	401,966	28.1%	112,821	31 0%	124,463
Hawaii	62,311	28.1%	17,489	31 0%	19,294
Idaho	19,115	28.1%	5,365	31 0%	5,919
Illinois	414,479	28.1%	116,333	31 0%	128,338
Indiana	334,218	28.1%	93,806	31 0%	103,486
Iowa	114,108	28.1%	32,027	31 0%	35,332
Kansas	148,384	28.1%	41,648	31.0%	45,945
Kentucky	203,808	28.1%	57,204	31.0%	63,106
Louisiana	278,378	28.1%	78,134	31 0%	86,196
Maine	58,443	28.1%	16,403	31 0%	18,096
Maryland	277,035	28.1%	77,757	31.0%	85,780
Massachusetts	272,646	28.1%	76,525	31.0%	84,421
Michigan	0	28.1%	0	31 0%	0
Minnesota	137,500	28 1%	38,593	31.0%	42,575
Mississippi	178,003	28.1%	49,961	31.0%	55,116
Missouri	132,829	28.1%	37,282	31 0%	41,129
Montana	60,091	28.1%	16,866	31.0%	18,606
Nebraska	62,530	28.1%	17,551	31.0%	19,362
Nevada	0	28.1%	0	31.0%	0
New Hampshire	39,079	28.1%	10,968	31.0%	12,100
New Jersey	347,871	28 1%	97,638	31.0%	107,714
New Mexico	101,850	28.1%	28,587	31.0%	31,536
New York	831,139	28.1%	233,279	31.0%	257,351
North Carolina	425,055	28 1%	119,302	31.0%	131,613
North Dakota	43,283	28 1%	12,148	31.0%	13,402
Ohio	429,961	28 1%	120,679	31.0%	133,132
Oklahoma	202,226	28 1%	56,760	31.0%	62,616
Oregon	29,048	28.1%	8,153	31.0%	8,994
Pennsylvania	365,771	28.1%	102,662	31.0%	113,256
Rhode Island	51,691	28.1%	14,508	31.0%	16,005
South Carolina	177,234	28 1%	49,745	31.0%	54,878
South Dakota	27,625	28 1%	7,754	31.0%	8,554
Tennessee	61,918	28.1%	17,379	31 0%	19,172
Texas	364,564	28 1%	102,324	31.0%	112,882
Utah	19,425	28 1%	5,452	31.0%	6,015
Vermont	0	28.1%	0	31.0%	0
Virginia	270,158	28.1%	75,826	31.0%	83,651
Washington	236,432	28.1%	66,360	31 0%	73,208
West Virginia	126,545	28.1%	35,518	31 0%	39,183
Wisconsin	167,455	28.1%	47,000	31.0%	51,850
Wyoming	21,734	28.1%	6,100	31 0%	6,730
Nationwide	9,495,000	28.1%	2,665,000	31 0%	2,940,000

Note: Some numbers in this table have been rounded

Section 2: Change to baseline: effects from the new policy
Table 2.F
Estimated state-by-state additional Lifeline subscribers using a 1.50 PGC (Year 2005)

State	a (Table 2 B) Additional HH that would qualify if 1 5 PGC were added	Low range b (Table 2 D) Take rate among HH that qualify due to 1.5 PGC	c=a*b Additional LL takers due to 1,5 PGC	High range d (Table 2 D) Take rate among HH that qualify due to 1.5 PGC	e=a*d Additional LL takers due to 1 5 PGC
Alabama	258,665	28 1%	72,600	31 0%	80,092
Alaska	16,963	28 1%	4,761	31 0%	5,252
Arizona	265,320	28 1%	74,468	31 0%	82,153
Arkansas	162,639	28.1%	45,649	31.0%	50,359
California	0	28.1%	0	31 0%	0
Colorado	243,872	28.1%	68,449	31 0%	75,512
Connecticut	124,648	28 1%	34,986	31 0%	38,596
Delaware	25,677	28 1%	7,207	31 0%	7,951
DC	0	28 1%	0	31 0%	0
Florida	1,157,077	28 1%	324,761	31 0%	358,273
Georgia	454,716	28 1%	127,627	31 0%	140,797
Hawaii	64,143	28 1%	18,003	31 0%	19,861
Idaho	20,106	28.1%	5,643	31.0%	6,226
Illinois	456,124	28.1%	128,022	31 0%	141,233
Indiana	385,069	28.1%	108,079	31 0%	119,231
Iowa	116,644	28 1%	32,739	31 0%	36,117
Kansas	159,356	28 1%	44,727	31 0%	49,342
Kentucky	211,682	28 1%	59,414	31 0%	65,544
Louisiana	296,506	28 1%	83,222	31 0%	91,809
Maine	73,718	28 1%	20,691	31.0%	22,826
Maryland	300,198	28 1%	84,258	31.0%	92,952
Massachusetts	295,573	28 1%	82,960	31.0%	91,520
Michigan	0	28 1%	0	31 0%	0
Minnesota	156,472	28.1%	43,918	31 0%	48,449
Mississippi	195,354	28.1%	54,831	31.0%	60,489
Missouri	137,865	28.1%	38,695	31 0%	42,688
Montana	66,649	28 1%	18,707	31 0%	20,637
Nebraska	66,713	28 1%	18,725	31 0%	20,657
Nevada	0	28 1%	0	31.0%	0
New Hampshire	47,718	28 1%	13,393	31.0%	14,775
New Jersey	391,462	28.1%	109,873	31.0%	121,211
New Mexico	109,732	28 1%	30,799	31.0%	33,977
New York	884,133	28.1%	248,153	31.0%	273,760
North Carolina	492,937	28 1%	138,355	31.0%	152,631
North Dakota	48,917	28 1%	13,730	31 0%	15,147
Ohio	442,441	28 1%	124,182	31 0%	136,996
Oklahoma	210,716	28.1%	59,143	31 0%	65,245
Oregon	30,025	28.1%	8,427	31 0%	9,297
Pennsylvania	392,664	28.1%	110,210	31 0%	121,583
Rhode Island	61,322	28.1%	17,212	31 0%	18,988
South Carolina	183,413	28.1%	51,479	31.0%	56,791
South Dakota	32,135	28.1%	9,019	31 0%	9,950
Tennessee	70,334	28.1%	19,741	31 0%	21,778
Texas	369,437	28 1%	103,691	31.0%	114,391
Utah	21,303	28 1%	5,979	31 0%	6,596
Vermont	0	28 1%	0	31 0%	0
Virginia	289,431	28 1%	81,236	31 0%	89,618
Washington	253,003	28.1%	71,011	31.0%	78,339
West Virginia	127,347	28 1%	35,743	31 0%	39,431
Wisconsin	189,667	28 1%	53,235	31 0%	58,728
Wyoming	22,531	28 1%	6,324	31 0%	6,976
Nationwide	10,382,000	28 1%	2,914,000	31.0%	3,215,000

Note Some numbers in this table have been rounded

Section 2: Change to baseline: effects from the new policy
Table 2.G
Estimated increase in Lifeline expenditures (Year 2005)

State	a (Table 1.C) Annual federal support per Lifeline subscriber	Low range		High range	
		b (Table 2 F) Forecasted additional HH taking Lifeline	c=a*b Forecasted increased federal Lifeline expenditures	d (Table 2.F) Forecasted additional HH taking Lifeline	e=a*d Forecasted increased federal Lifeline expenditures
Alabama	$120 00	72,600	$8,712,054	80,092	$9,611,046
Alaska	$120.00	4,761	$571,334	5,252	$630,290
Arizona	$99 67	74,468	$7,421,900	82,153	$8,187,762
Arkansas	$99 00	45,649	$4,519,194	50,359	$4,985,527
California	$100.02	0	$0	0	$0
Colorado	$120.00	68,449	$8,213,836	75,512	$9,061,418
Connecticut	$96 26	34,986	$3,367,877	38,596	$3,715,406
Delaware	$98 04	7,207	$706,571	7,951	$779,481
DC	$87.84	0	$0	0	$0
Florida	$120.00	324,761	$38,971,362	358,273	$42,992,797
Georgia	$120.00	127,627	$15,315,227	140,797	$16,895,598
Hawaii	$99.00	18,003	$1,782,313	19,861	$1,966,229
Idaho	$118.92	5,643	$671,075	6,226	$740,323
Illinois	$89.01	128,022	$11,394,798	141,233	$12,570,621
Indiana	$89.39	108,079	$9,661,413	119,231	$10,658,369
Iowa	$83.48	32,739	$2,733,047	36,117	$3,015,069
Kansas	$105 87	44,727	$4,735,469	49,342	$5,224,119
Kentucky	$118 29	59,414	$7,028,232	65,544	$7,753,471
Louisiana	$99.00	83,222	$8,238,980	91,809	$9,089,156
Maine	$119 19	20,691	$2,466,169	22,826	$2,720,651
Maryland	$109 33	84,258	$9,211,947	92,952	$10,162,523
Massachusetts	$119 04	82,960	$9,875,552	91,520	$10,894,605
Michigan	$98.54	0	$0	0	$0
Minnesota	$84.44	43,918	$3,708,590	48,449	$4,091,278
Mississippi	$120 00	54,831	$6,579,710	60,489	$7,258,667
Missouri	$84.97	38,695	$3,287,844	42,688	$3,627,115
Montana	$120.00	18,707	$2,244,788	20,637	$2,476,427
Nebraska	$113.15	18,725	$2,118,733	20,657	$2,337,364
Nevada	$94.49	0	$0	0	$0
New Hampshire	$98.08	13,393	$1,313,584	14,775	$1,449,132
New Jersey	$95.45	109,873	$10,487,737	121,211	$11,569,961
New Mexico	$120.00	30,799	$3,695,875	33,977	$4,077,250
New York	$117.99	248,153	$29,280,261	273,760	$32,301,676
North Carolina	$116.61	138,355	$16,134,077	152,631	$17,798,944
North Dakota	$120.00	13,730	$1,647,578	15,147	$1,817,590
Ohio	$87.99	124,182	$10,926,961	136,996	$12,054,508
Oklahoma	$93.36	59,143	$5,521,621	65,245	$6,091,394
Oregon	$120.00	8,427	$1,011,274	9,297	$1,115,627
Pennsylvania	$108.32	110,210	$11,937,808	121,583	$13,169,664
Rhode Island	$119.04	17,212	$2,048,864	18,988	$2,260,285
South Carolina	$119.72	51,479	$6,163,141	56,791	$6,799,113
South Dakota	$98.47	9,019	$888,163	9,950	$979,812
Tennessee	$118.70	19,741	$2,343,169	21,778	$2,584,960
Texas	$106 81	103,691	$11,075,569	114,391	$12,218,451
Utah	$119 22	5,979	$712,838	6,596	$786,395
Vermont	$119.20	0	$0	0	$0
Virginia	$113.22	81,236	$9,197,758	89,618	$10,146,870
Washington	$115 40	71,011	$8,194,635	78,339	$9,040,235
West Virginia	$111.00	35,743	$3,967,545	39,431	$4,376,954
Wisconsin	$92.68	53,235	$4,933,780	58,728	$5,442,894
Wyoming	$120 00	6,324	$758,866	6,976	$837,173
Nationwide	Not applicable	2,914,000	$316,000,000	3,215,000	$348,000,000

Note. Some numbers in this table have been rounded

Section 2: Change to baseline: effects from the new policy
Table 2.H
Logit regression results: Would a 1.50 Poverty Guidelines Criterion for Lifeline increase telephone penetration?

Logistic regression analysis[1]

Dependent side variable: Does the household have telephone service?				
Independent side variables	Coefficient value	Wald statistic	P-Value	Statistically significant
State has 1.50 poverty guidelines criterion for Lifeline	0.110	0.21	0.65	No
Income (000s)	0.027	4.90	0.03	Yes
Household is a mobile home	-1.137	24.10	0.00	Yes
Household is owned, not rented	0.962	26.60	0.00	Yes
Percentage of householders who have lived there one year	0.784	17.66	0.00	Yes
Someone in the household is on food stamps	-0.456	3.51	0.06	Yes
Constant	1.195	18.23	0 00	Yes
Conclusion: No, the coefficient on "State has 1.5 poverty guidelines criterion for Lifeline" is not statistically significant.				

[1] For more information on the logistic regression, see Technical Appendix 2.

Section 3: New policy: new levels resulting from a 1.50 PGC (as of July 1, 2005)

Table 3.A

Forecasted new Lifeline subscribers (Year 2005)

State	a (Table 1 B) Forecasted households	b (Table 1 B) Forecasted baseline households taking Lifeline	Low range		High range	
			c (Table 2 F) Additional LL takers due to 1 5 PGC	d=b+c New total households taking Lifeline	e (Table 2.F) Additional LL takers due to 1.5 PGC	f=b+e New total households taking Lifeline
Alabama	1,766,868	25,618	72,600	98,219	80,092	105,710
Alaska	236,684	24,567	4,761	29,328	5,252	29,819
Arizona	2,185,979	82,488	74,468	156,956	82,153	164,641
Arkansas	1,117,248	10,655	45,649	56,304	50,359	61,014
California	11,675,997	3,162,324	0	3,162,324	0	3,162,324
Colorado	1,853,209	32,568	68,449	101,017	75,512	108,080
Connecticut	1,560,766	65,570	34,986	100,555	38,596	104,165
Delaware	353,960	2,390	7,207	9,597	7,951	10,341
DC	328,431	16,638	0	16,638	0	16,638
Florida	7,875,457	167,936	324,761	492,697	358,273	526,209
Georgia	3,588,499	77,224	127,627	204,851	140,797	218,021
Hawaii	430,831	14,539	18,003	32,542	19,861	34,400
Idaho	521,070	29,093	5,643	34,737	6,226	35,319
Illinois	5,322,880	95,948	128,022	223,971	141,233	237,181
Indiana	2,881,893	46,461	108,079	154,540	119,231	165,693
Iowa	1,188,981	18,196	32,739	50,935	36,117	54,313
Kansas	1,169,256	14,794	44,727	59,521	49,342	64,136
Kentucky	1,644,539	63,085	59,414	122,499	65,544	128,630
Louisiana	1,777,645	22,650	83,222	105,871	91,809	114,459
Maine	720,589	107,956	20,691	128,647	22,826	130,782
Maryland	2,258,191	4,358	84,258	88,616	92,952	97,310
Massachusetts	2,801,968	178,441	82,960	261,401	91,520	269,962
Michigan	4,386,888	132,031	0	132,031	0	132,031
Minnesota	2,269,978	54,115	43,918	98,033	48,449	102,565
Mississippi	1,204,582	24,766	54,831	79,597	60,489	85,255
Missouri	2,302,085	34,585	38,695	73,280	42,688	77,273
Montana	420,615	17,541	18,707	36,248	20,637	38,178
Nebraska	724,145	16,261	18,725	34,985	20,657	36,918
Nevada	1,068,492	49,112	0	49,112	0	49,112
New Hampshire	639,804	8,856	13,393	22,250	14,775	23,632
New Jersey	3,671,381	52,537	109,873	162,410	121,211	173,748
New Mexico	752,325	51,021	30,799	81,820	33,977	84,998
New York	7,759,204	532,594	248,153	780,747	273,760	806,354
North Carolina	3,731,543	115,402	138,355	253,756	152,631	268,033
North Dakota	311,615	21,729	13,730	35,458	15,147	36,875
Ohio	4,729,065	287,706	124,182	411,888	136,996	424,702
Oklahoma	1,423,636	122,222	59,143	181,364	65,245	187,467
Oregon	1,412,789	37,626	8,427	46,054	9,297	46,923
Pennsylvania	5,221,614	101,819	110,210	212,030	121,583	223,402
Rhode Island	508,546	54,795	17,212	72,007	18,988	73,783
South Carolina	1,629,353	22,569	51,479	74,049	56,791	79,361
South Dakota	358,305	31,543	9,019	40,563	9,950	41,493
Tennessee	2,621,206	55,717	19,741	75,458	21,778	77,495
Texas	7,593,412	435,718	103,691	539,409	114,391	550,109
Utah	785,443	21,551	5,979	27,530	6,596	28,147
Vermont	296,953	34,193	0	34,193	0	34,193
Virginia	2,956,550	22,209	81,236	103,445	89,618	111,827
Washington	2,565,534	89,167	71,011	160,179	78,339	167,506
West Virginia	764,140	4,936	35,743	40,679	39,431	44,367
Wisconsin	2,471,029	77,397	53,235	130,631	58,728	136,125
Wyoming	204,196	2,204	6,324	8,528	6,976	9,180
Nationwide	118,045,768	6,775,000	2,914,000	9,689,000	3,215,000	9,990,000

Note Some numbers in this table have been rounded

Section 3: New policy. new levels resulting from a 1.50 PGC (as of July 1, 2005)
Table 3 B
Forecasted new Lifeline expenditures (Year 2005)

State	a (Table 1 C) Annual federal Lifeline expenditures without 1.5 PGC	Low range b (Table 2 K) Additional federal Lifeline expenditures with 1 5 PGC	c=a*b Total federal Lifeline expenditures with 1.5 PGC	High range d (Table 2 K) Additional federal Lifeline expenditures with 1 5 PGC	e=a*d Total federal Lifeline expenditures with 1.5 PGC
Alabama	$3,074,197	$8,712,054	$11,786,251	$9,611,046	$12,685,243
Alaska	$2,948,007	$571,334	$3,519,341	$630,290	$3,578,296
Arizona	$8,221,159	$7,421,900	$15,643,060	$8,187,762	$16,408,922
Arkansas	$1,054,846	$4,519,194	$5,574,040	$4,985,527	$6,040,373
California	$316,308,133	$0	$316,308,133	$0	$316,308,133
Colorado	$3,908,155	$8,213,836	$12,121,991	$9,061,418	$12,969,573
Connecticut	$6,312,049	$3,367,877	$9,679,926	$3,715,406	$10,027,455
Delaware	$234,348	$706,571	$940,918	$779,481	$1,013,829
DC	$1,461,447	$0	$1,461,447	$0	$1,461,447
Florida	$20,152,282	$38,971,362	$59,123,644	$42,992,797	$63,145,079
Georgia	$9,266,937	$15,315,227	$24,582,164	$16,895,598	$26,162,535
Hawaii	$1,439,387	$1,782,313	$3,221,699	$1,966,229	$3,405,615
Idaho	$3,459,726	$671,075	$4,130,801	$740,323	$4,200,049
Illinois	$8,540,023	$11,394,798	$19,934,821	$12,570,621	$21,110,644
Indiana	$4,153,300	$9,661,413	$13,814,713	$10,658,369	$14,811,669
Iowa	$1,518,973	$2,733,047	$4,252,020	$3,015,069	$4,534,042
Kansas	$1,566,265	$4,735,469	$6,301,733	$5,224,119	$6,790,384
Kentucky	$7,462,594	$7,028,232	$14,490,826	$7,753,471	$15,216,065
Louisiana	$2,242,338	$8,238,980	$10,481,318	$9,089,156	$11,331,494
Maine	$12,867,569	$2,466,169	$15,333,737	$2,720,651	$15,588,220
Maryland	$476,493	$9,211,947	$9,688,440	$10,162,523	$10,639,016
Massachusetts	$21,241,723	$9,875,552	$31,117,276	$10,894,605	$32,136,329
Michigan	$13,010,610	$0	$13,010,610	$0	$13,010,610
Minnesota	$4,569,718	$3,708,590	$8,278,308	$4,091,278	$8,660,996
Mississippi	$2,971,882	$6,579,710	$9,551,592	$7,258,667	$10,230,549
Missouri	$2,938,649	$3,287,844	$6,226,493	$3,627,115	$6,565,764
Montana	$2,104,915	$2,244,788	$4,349,703	$2,476,427	$4,581,342
Nebraska	$1,839,924	$2,118,733	$3,958,657	$2,337,364	$4,177,288
Nevada	$4,640,695	$0	$4,640,695	$0	$4,640,695
New Hampshire	$868,626	$1,313,584	$2,182,210	$1,449,132	$2,317,758
New Jersey	$5,014,836	$10,487,737	$15,502,573	$11,569,961	$16,584,798
New Mexico	$6,122,532	$3,695,875	$9,818,407	$4,077,250	$10,199,782
New York	$62,842,179	$29,280,261	$92,122,439	$32,301,676	$95,143,854
North Carolina	$13,457,472	$16,134,077	$29,591,549	$17,798,944	$31,256,416
North Dakota	$2,607,431	$1,647,578	$4,255,009	$1,817,590	$4,425,022
Ohio	$25,315,775	$10,926,961	$36,242,736	$12,054,508	$37,370,283
Oklahoma	$11,410,768	$5,521,621	$16,932,389	$6,091,394	$17,502,162
Oregon	$4,515,156	$1,011,274	$5,526,430	$1,115,627	$5,630,783
Pennsylvania	$11,028,901	$11,937,808	$22,966,709	$13,169,664	$24,198,565
Rhode Island	$6,522,833	$2,048,864	$8,571,697	$2,260,285	$8,783,118
South Carolina	$2,702,025	$6,163,141	$8,865,166	$6,799,113	$9,501,137
South Dakota	$3,106,151	$888,163	$3,994,314	$979,812	$4,085,963
Tennessee	$6,613,430	$2,343,169	$8,956,599	$2,584,960	$9,198,389
Texas	$46,540,253	$11,075,569	$57,615,822	$12,218,451	$58,758,704
Utah	$2,569,386	$712,838	$3,282,223	$786,395	$3,355,781
Vermont	$4,075,759	$0	$4,075,759	$0	$4,075,759
Virginia	$2,514,557	$9,197,758	$11,712,315	$10,146,870	$12,661,427
Washington	$10,289,790	$8,194,635	$18,484,425	$9,040,235	$19,330,025
West Virginia	$547,914	$3,967,545	$4,515,460	$4,376,954	$4,924,869
Wisconsin	$7,173,137	$4,933,780	$12,106,917	$5,442,894	$12,616,031
Wyoming	$264,475	$758,866	$1,023,341	$837,173	$1,101,648
Nationwide	$706,000,000	$316,000,000	$1,022,000,000	$348,000,000	$1,054,000,000

Note Some numbers in this table have been rounded

Technical Appendix 1

Background information for Table 2.C (Would Lifeline take rates increase due to a nationwide implementation of a 1.35 PGC?)

Below are the two regression results that are used to determine the effect that a nationwide implementation of a 1.35 poverty guideline criterion would have on Lifeline subscribership.

Regression 1 – Lifeline specification 1.

The regression model calculated from the data is

%HHBelow15OnLL=
0.08 + 0.55 x IncElgAbv125 + 0.99 x California + 0.01 x TotSup.

Explanation of variables for Lifeline regression specification 1.

The dependent variable is the number of households taking Lifeline divided by the number of households that are at or below 1.50 times the federal poverty guidelines.[13] This variable is abbreviated as "%HHBelow15OnLL" in the regressions below. For example, Texas had 429,970 Lifeline subscribers in 2002, and 1,789,726 households at or below 1.50 times the poverty line. The dependent variable data point for Texas therefore equals 0.24 (=429,970/1,789,726).

The first Independent Variable is IncEligAbv125. For each state, IncEligAbv125 equals that state's income eligibility level (if it has one) minus 1.25. So, for California, which has an income eligibility criterion of 1.50 times the poverty guidelines, IncEligAbv125 equals 0.25 (= 1.5 – 1.25). For states with an income eligibility criterion at or below 1.25 times the poverty guidelines, or for states without an income criterion, IncEligAbv125 equals 0. So, for Texas, which has an income eligibility criterion of 1.25 times the poverty guidelines, IncEligAbv125 equals 0. The coefficient on this variable allows us to predict the percentage increase in the number of households that would take Lifeline if a 1.35 PGC were adopted.

---

[13] The Department of Health and Human Services establishes the federal poverty guidelines, which is based on the number of people living in the household, and whether the household is in the mainland United States, Alaska, or Hawaii.

So for Texas, and other states with a 1.25 PGC (and for states without an income-based criterion), the new policy would increase the independent variable from 0.25 to 0.35, or by 0.1, and the dependent variable would increase 5.5 percentage points. The percentage point increase in percentage of households at or below 1.50 times the poverty guidelines that take Lifeline because of a 1.35 PGC were implemented would be 5.5%.

$$= 0.55 * 0.1 = 0.055 \text{ or } 5.5\%. \text{ }^{14}$$

The second Independent Variable is "California". In statistical terms, this is called a "dummy" variable, and equals 1 if the state is California, and is 0 otherwise. A dummy variable is often used in regression analysis to quantify specific effects. California is the only state using self-certification with an income-based criterion, and it appears to have more households taking Lifeline than the CPSH data would indicate are eligible for it. Therefore, singling out California with a dummy variable to measure a California-specific effect is warranted.

The variable "TotSup" is the amount of monthly telephone service support that Lifeline subscribers in each state receive (TotSup). The amount of total support that households receive varies with the local telephone carrier. For each state, TotSup is the amount of support from the largest carrier in that state. For example, in Texas, Lifeline subscribers pay $11.35 per month less for telephone service than regular telephone subscribers. Therefore, the TotSup datapoint for Texas is $11.35. The more support that eligible households can receive, the more incentive they have to take Lifeline.

---

[14] The coefficient 0.58 is used to calculate the number of additional households that would take Lifeline with a 1.35 PGC It is multiplied by the number of households at or below 1.50 times the poverty guidelines (i.e., from 0.0 to 1.50 times the poverty guidelines). Even though those households between 1.35 and 1.50 times the poverty guidelines would not actually qualify for Lifeline, the model coefficient is estimated in such a way that a correct prediction is made.

Regression 2 – Lifeline specification 2.

%HHBelow15OnLL =
0.17 + 0.61 x IncElgAbv125 + 0.99 x California

When comparing the two specifications, this one suggests that more households would take Lifeline because the coefficient 0.61 is greater than the 0.55 coefficient in Regression 1. So for Texas, and other states with a 1.25 PGC, and for states without an income criterion, the percentage point increase in the percentage of households at or below 1.50 times the poverty guidelines that would take Lifeline because of a 1.35 PGC is 6.1%.

$$= 0.61 \; *x \; 0.1 = 0.061 \; or \; 6.1\%.$$

Additional information about Lifeline regression specifications 1 and 2:

Data sources.

The data are from the Current Population Survey of Households (CPSH) (March 2002 data), USAC, *Universal Service Monitoring Report* (October 2002), and <www.lifelinesupport.org>. The CPSH data are used to determine demographic data about households and whether they have telephone service. USAC provided data on the number of Lifeline subscribers in each state for 2002. The *Universal Service Monitoring Report* was used to determine the total support (number of dollars) that Lifeline subscribers received in each state. USAC's website <www.lifelinesupport.org> was used to determine which states had income criteria for Lifeline in 2002, and the multiple of the Federal Poverty Guidelines that was required to be eligible for Lifeline in those states.

Data are aggregated to the state level.

CPSH has data for thousands of households, including whether the household has telephone service or not. If it were possible to do so, it would be best to conduct the analysis at the household level to maximize the number of observations and to account for several demographic factors. Unfortunately, CPSH data do not report whether the household is receiving the Lifeline subsidy. Therefore, individual data observations could not directly be used for the estimation. The number of Lifeline subscribers for each state is available from the USAC, so the CPSH data are aggregated to the state level to match the USAC data. Thus, there is a single data point constructed for each state. The number of households that are at or below 1.50 times the poverty guidelines in a particular state is determined by summing the statistical weight of each household at or below 1.50 times the poverty guidelines (the statistical weight for each household is determined by the Bureau of Labor Statistics), and dividing by 100. (The statistical weights add up to 100 times the number of households in the state, so dividing by 100 is a necessary step.)

Additional information on regression specification

The dependent variable:% HHBelow150nLL.

As mentioned above, the dependent variable is the number of households taking Lifeline divided by the number of households that are at or below 1.50 times the poverty guidelines. The dependent variable should be a measure of participation rate, and this requires a measure of takers and a measure of eligibility. An ideal measure would have been the number of households taking Lifeline divided by the total number of households that are eligible. Obtaining a precise measure of number of eligible households in each state is not possible, as will be explained below, so a surrogate measure "number of households that are at or below 1.50 times the poverty guidelines" is used in its place. As long as the resulting surrogate participation rate is consistent across states, and used properly, the resulting analysis is correct.

The surrogate is necessary because of a measurement problem. There are several states where it is difficult to measure the number of households that are eligible for Lifeline. This happens most often when states use state-specific programs as eligibility criteria. Because the CPSH survey does not ask about every possible welfare program, the CPSH data cannot always be used to determine if a household is eligible for Lifeline or not.

Therefore, an alternative dependent variable was needed. The number of households below 1.50 times the poverty guidelines is a reasonable proximate measure of support need. So, instead of dividing the number of households taking Lifeline by the number of households eligible for Lifeline, the dependent variable in this analysis is the number of households taking Lifeline divided by the number of households that are at or below 1.50 times the federal poverty guidelines. The 1.50 multiple was chosen because it was the highest poverty guideline criterion used by any state, and it was used by several states.

The principal independent variable: **IncEligAbv125.**

As mentioned above, IncEligAbv125 equals that state's income eligibility level (if it has one) minus 1.25. If the state has no income eligibility criterion, or if it has one that is less than 1.25 times the poverty guidelines, then the datapoint equals zero for that state.

The main objective of the regression analysis is to quantify the number of additional households that will subscribe to Lifeline with the implementation of an income-based eligibility criterion. Generally, states using higher multiples of the poverty guidelines as an eligibility criterion have higher Lifeline participation rates than states using lower multiples of the poverty guidelines criteria (or states using no income based criterion at all). The coefficient on IncEligAbv125 is used to predict the number of households that would take Lifeline due to a 1.35 PGC.

Preliminary modeling indicated that a nationwide implementation of an income criterion set at or below 1.25 times the poverty guidelines would not increase the number of households taking Lifeline by a statistically significant amount. Because some states use lower multiples of the poverty guidelines to determine Lifeline eligibility, one would expect that using a higher multiple of the poverty guidelines would increase the number of households eligible for Lifeline in those states. However, basing this independent variable on lower multiples of the poverty guidelines did not produce statistically significant results.

Discussion

Discussion of independent variables:

The variable "California" is significant in both regressions (indeed, it was significant for all regression specifications in which it is included).

"TotSup" is positive, but is not significant. It has a t-statistic greater than one, however, indicating that it still increases the adjusted R squared. Further, there is strong economic reason to include it, because it measures a household's incentive to take Lifeline, so it should not be eliminated from the model without good reason.

"IncEligAbv125" is significant in both regressions, but the size of the coefficient varies somewhat, and its significance drops somewhat when TotSup is included. Other specifications of the model were run that included whether each state had a particular program as an eligibility criteria. Throughout most of the trial specifications, the coefficient of IncEligAbv125 ranged between the two values presented in this report and remained significant. Therefore, the analyses presented in this report are very robust.

Low-income Home Energy Assistance Program (LIHEAP)

Other regression models using trial variables were tested, but for the reasons listed below, these models are not adopted. However, when the regression included whether the state had LIHEAP as a method for qualifying for Lifeline, the coefficient on IncEligAbv125 dropped 30% and was not significant. This trial regression model is unsound for two reasons.

First, if the results were accurate, it would indicate that there would be no significant additional Lifeline subscribership with the implementation of a 1.35 PGC. This is not plausible, because the logistic regression analysis (see Appendix 2) indicates that a 1.35 PGC would significantly increase the number of households taking telephone service. Because we find strong evidence that a 1.35 PGC would increase telephone subscribership, a similar impact on Lifeline subscribership is also expected.

Second, if the coefficient on IncEligAbv125 from the Lifeline Regression were inserted into the model, it would indicate that just 10% of those households that would become eligible would take Lifeline service, which seems far too low. Currently, well over 30% of eligible households take Lifeline service. While the percentage of eligible households that would take Lifeline would surely decrease as eligibility requirements were eased, there is no reason to believe that it

would drop by more than 2/3. Thus, adding a variable quantifying whether the state has LIHEAP as an eligibility requirement leads to irrational results. That trial regression is therefore not used.[15]

Given that the coefficient on IncEligAbv125 ranges between 0.554 and 0.612 in most trial regressions without the LIHEAP variable, that range is used in this study. Table 2.D uses the results from the regression analysis to quantify the number of households that would take Lifeline as a result of a 1.35 PGC.

The statistical computer program Stata 8.0 was used to run the OLS regressions. The regression outputs (below) show the significance of each coefficient.

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[15] We note that there is some multicollinearity between the LIHEAP variable and TotSup. As a practical matter, if energy assistance is included in the regression and TotSup is removed, then the coefficient on IncElgAbv125 returns to normal levels and is significant.

```
reg  HHBelow15onLL  totsup california incelgabv125

      Source |       SS        df       MS              Number of obs =      51
-------------+------------------------------           F(  3,    47) =   20.24
       Model | 1.36519991      3    455066636           Prob > F       =  0.0000
    Residual | 1.05697291     47   .022488785           R-squared     =  0.5636
-------------+------------------------------           Adj R-squared =  0.5358
       Total | 2.42217282     50    048443456           Root MSE      =  .14996


Variables    |    Coef.   Std. Err.      t    P>|t|    [95% Conf. Interval]
-------------+----------------------------------------------------------------
    constant |  .0818321    .092501    0.88   0.381    -.1042558     .26792
 incelgabv125|  .5543479   .3122355    1.78   0.082    -.0737889    1.182485
   california|  .9900143   .1665154    5.95   0.000     .6550286      1.325
      totsup |  .0095577   .0093566    1.02   0.312    -.0092652    .0283807
-----------------------------------------------------------------------------

reg  %hhbelow15onll  california incelgabv125

      Source |       SS        df       MS              Number of obs =      51
-------------+------------------------------           F(  2,    48) =   29.80
       Model | 1.34173373      2   .670866866           Prob > F       =  0.0000
    Residual | 1.08043909     48   .022509148           R-squared     =  0.5539
-------------+------------------------------           Adj R-squared =  0.5354
       Total | 2.42217282     50   .048443456           Root MSE      =  .15003


Variables    |    Coef.   Std. Err.      t    P>|t|    [95% Conf. Interval]
-------------+----------------------------------------------------------------
    constant |  .1734751   .0225442    7.69   0.000     .1281469    .2188033
 incelgabv125|  .6119323   .3072435    1.99   0.052    -.0058221    1.229687
   california|  .9924552   .1665736    5.96   0.000     .6575366    1.327374
-----------------------------------------------------------------------------
```

Technical Appendix 2
Background information for Table 2.G
(Would a 1.35 PGC for Lifeline increase telephone penetration?)

Below are the results of two logistic regressions. They show the effects that a 1.35 PGC for Lifeline has on telephone subscribership. Logistic regression 1 was used for the study. Logistic regression 2 was used to test whether the Lifeline eligibility variables were necessary.

Logistic regression 1 — Telephone Specification 1:

$$Y = 1 / (1 + e^{-[1.24 + 0.179*X1 + 0.035*X2 - 0.575*X3 + 0.975*X4 + 0.463*X5 - 0.245*X6 - 0.269*X7 - 0.101*X8 + 0.105*X9 + 0.160*X10 - 0.070*X11 + 0.019*X12 + 0.060*X13 + 0.495*X14]})$$

Explanation of variables for Telephone Specification 1.

Dependent variable:

Does the household have telephone service? (Y = H_TELHHD)

The dependent variable is whether the low-income household has telephone service. The data point for a household equals one if the household has telephone service, and equals zero otherwise. The dataset is comprised of data from only those households with incomes at or below 1.50 times the poverty guidelines.

Independent variables:

Is the household in a state with a 1.35 or less restrictive poverty guideline criterion? (X_1 = SH135ORB)

If the household is in a state that uses a 1.35 PGC for Lifeline (or if the state uses a higher multiple of the poverty guidelines), then SH135ORB equals one for that data point; otherwise, it equals zero. Because the sample is restricted to only those households that are at or below 1.35 times the poverty guidelines, all data points for this variable will be either a "0" or "1". Of these low-income households, 18 percent live in a state with a 1.35 to 1.50 PGC, and the independent variable SH135ORB equals 1 for these households. For the other 82 percent, the independent variable SH135ORB value equals 0.

This is the only independent variable used in the cost/benefit analysis, and therefore the accuracy of its coefficient is of most concern. The coefficient on this variable (0.179) is later used to quantify the increased probability that a low-income household will take telephone service (or fraction of) as the result of a 1.35 PGC.[16]

This quantification is accomplished as follows: When X_1 is changed, Y will change. For an individual household, the change of X_1 from 0 to 1 models the effect of implementing a 1.35 PGC for that particular household. When modeling the change nationally, X_1 is changed from .18 (18%, which reflects the fact that 18 percent of the sample households already live in a state with a 1.35 PGC) to 1.[17] As a result, Y changes according to Logistic regression 1 above (Y is interpreted as a percentage—or probability—of households with telephone subscribership, and ranges from 0 to 1). When we change the "baseline" 18 percent of low-income households (living in a state with a 1.35 PGC) to the "new policy" 100 percent, then predicted telephone subscribership among sample households increases from 90.5 percent to 91.7 percent.

Total value of household income (X_2 = HTOTVAL)

The data points for each household equal the household's entire annual income, including any cash payments.

Is the household a mobile home? (X_3 = MOBILEH)

If the household is a mobile home, then the MOBHOME equals one for that datapoint; otherwise, it equals zero.

Is the household owned by the householders? (X_4 = OWNHOME)

If the householders own the home themselves, then OWNHOME for that data point equals 1; otherwise, it equals zero.

Percentage of households who lived at that address for at least one year. (X_5 = PCTONEYEAR)

The data points for PCTONEYEAR equal the percentage of the adults in that household that have lived at that address for at least one year.

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[16] The numbers used in actual calculations are carried out to 6 significant digits. For ease of viewing, however, the data in Table 2.H are displayed to only 3 significant digits.

[17] This number represents the portion of low income households that live in a state with a 1.33 or 1.50 PGC for Lifeline. It should not be confused with the logistic regression coefficient of .179. The similarity of numbers is purely coincidental

Is someone in the household on Food Stamps? (X_6 = HFOODSP)

If someone in the household is on Food Stamps, then HFOODSP equals one for that data point; otherwise, it equals zero.

Variables X_7 through X_{13}:

X_7 = State has Medicaid criterion
X_8 = State has Food Stamp criterion
X_9 = State has TANF criterion
X_{10} = State has LIHEAP criterion
X_{11} = State has FRHA (Section 8)
X_{12} = State has National free lunch program criterion
X_{13} = State has SSI criterion

These variables indicate whether the household is in a state that uses a particular Lifeline eligibility criterion. If the state uses that criterion, then the data point equals 1; otherwise, it equals zero. For example, if a household is in a state that allows households in the LIHEAP program to qualify for Lifeline, then the data point for variable X_{10} equals 1. If the state does not use LIHEAP as a criterion, then the data point equals 0.

Is the household in California (X_{14} =CALIFORNI)

If the household is in California, then California equals one for that data point; otherwise, it equals zero.

For the results of this specification, see page XX, below.

Logistic regression 2 — Telephone Specification 2:

Telephone Specification 2 includes all the variables from specification 1, except for the variables tracking state Lifeline eligibility requirements. This specification was run to determine if these variables, as a group, were significant. They are.[18]

For the results of this specification, see page XX, below.

Additional information about specifications 1 and 2

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[18] The significance of the eligibility requirements variables was determined using a chi squared test. The test is performed as follows. The logistic regression is run with the eligibility variables, and then without. The "-2*log likelihood" for both models are then compared. If the difference is greater than the chi squared critical value, then the variables are significant. The difference in the "-2*log likelihood" is 15.92. The critical value for a chi squared test at the 5% level for 7 degrees of freedom (the number of eligibility variables) is 14.07. The difference is greater than the critical value, so we conclude that the eligibility variables are significant.

Price

None of the logistic regression specifications include the price of telephone service. This is because the price that each household faces is unknown. Different carriers offer service at different prices, and even within the same carrier, the price of telephone service varies from city to city. Because the carrier that would serve each household is unknown, price cannot be included in the logistic regressions. Earlier research has shown that omitting the price of telephone service does not affect the coefficients of the other variables in this logistic regression. This is because the coefficient on price would be tiny, so any "missing variable" bias would also be tiny.[19]

Data sources

The data in this analysis are from the Current Population Survey of Households (CPSH) from March 2002. CPSH data contain information on over 70,000 households. From these data, the relevant demographic information are extracted for analysis, including: 1) whether the household has telephone service, 2) household's total income (including the value of transfer payments), 3) the state the household lives in, 4) whether the household dwelling is owned or rented, 5) whether the household is a mobile home, 6) the number of adult members that live in the household for at least one year, 7) the number of adults living in the household, and 8) the list of subsidies the household receives, which included Federal Public Housing Assistance (Section 8), Food Stamps, LIHEAP, Medicaid, and Supplemental Security Income.

Household-level data are used

All the information is available for each household, so the analysis is conducted at the household level; aggregating to the state level is unnecessary.

Logistic regression preferred to "standard" OLS regression

Because the dependent variable is binary (a household either has telephone service and is thereby assigned a values of one (1), or it does not and is thereby assigned a value of 0 (zero), logistic regression analysis is preferred to a Linear Probability model using Ordinary Least Squares (OLS). With binary dependent variables, linear regressions can produce erroneous results, such as a household having more than a 100% probability of taking telephone service, or a household

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[19] The formula for calculating the missing variable bias can be found in many textbooks, including William H. Greene, Econometric Analysis, at 402 (3rd ed. 1997). Observation of the equation shows that if the missing variable is uncorrelated with an independent variable, then the coefficient on that independent variable is unbiased. A regression was run to see if telephone prices are correlated with the variable SH135ORB. The weighted average price for each of the 41 states for which price data are available was created. The variable price was then regressed on the variable SH135ORB. There was no correlation. (*See* Industry Analysis and Technology Division, Wireline Competition Bureau, Federal Communications Commission, *Reference Book,* at 7-8 (2002).

having a negative probability of taking telephone service. Both of these situations are impossible. Logistic regression analysis avoids this problem, and is appropriate for measuring saturation concepts such as telephone penetration. The following graph illustrates the difference between the two approaches. In the following graph (taken from the Internet), "linear probability model" refers to OLS regression results, and Y (ranging from 0 to 1) refers to probability. [20]

Comparing the LP and Logit Models
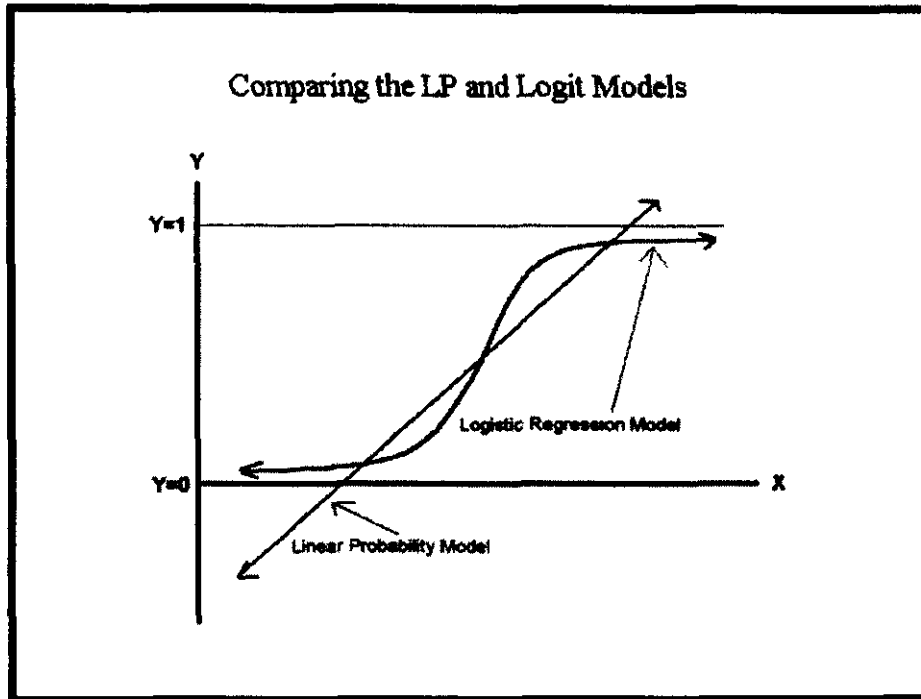
Unfortunately, logistic regressions produce coefficients that are more difficult to interpret than the coefficients that OLS produces. A few additional computations are needed to use the coefficients in the cost-benefit analysis. Therefore, Table 2.H is created, which uses the coefficients from the logistic regression to determine the number of households that would have taken phone service in 2002 and 2005 if a 1.35 poverty guideline criterion were instituted nationally. The number of households that would take telephone service because of a 1.35 PGC is then compared to the number of households that would take Lifeline in Table 2.I.

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[20] For more information on logistic regression analysis, *see* Damodar Gujarati, Basic Econometrics at 481-491 (2nd ed. 1998).

Quantifying logistic regression coefficients

In a standard regression analysis, the effect that a change in the independent variable has on the dependent variable is relatively easy to measure because it is linear. When using standard linear regression, a model is often expressed as follows: Y = a + b*X. In this equation, Y represents the dependent variable, "a" represents a constant, and "b" is the coefficient from the regression which is multiplied by the size of the independent variable X. The symbol Δ is often used to represent the change in a variable.

The change in Y caused by a change in X is then represented like this:
ΔY = b*ΔX. Thus, the change in Y for a change in an independent variable is simply the coefficient on the independent variable times the amount of the change in that independent variable.

Because logistic regression analysis is not linear, however, the above calculation cannot be made directly. Instead, two intermediate calculations must be made. The first calculation quantifies the dependent variable using the mean values of the independent variables. The second calculation quantifies the dependent variable using the same means as in the first calculation, except that one of the independent variables is set to the new policy level. The second calculation replaces the mean of the independent of the variable in question (e.g., a policy variable) with an appropriate value representing the change in the variable. If all states adopted a 1.35 PGC, then the percentage of low income households living in a state with a 1.35 PGC would move from 18% to 100%. So, in this case, the mean of SH135ORB (which equals 0.180) would be replaced with 1.00.

For both calculations, Y is calculated by the following equation:

$$Y = 1/(1 + e^{-[1.24 + 0.179*X1 + 0.035*X2 - 0.757*X3 + 0.975*X4 + 0.463*X5 - 0.245*X6 - 0.269*X7 - 0.101*X8 + 0.105*X9 + 0.160*X10 - 0.070*X11 + 0.019*X12 + 0.060*X13 + 0.495*X14]})$$

Table 2.H explains the calculations. The coefficient values from the logistic regression are in column a. The means of the independent variables are in column b. Column c multiplies columns a and b. These products are often called the "partial effects". The partial effects are then summed to create a Z score. The Z score is simply a shorthand way of representing a +b1*x1 + b2*x2 + ... When evaluating the independent variables at their mean values, the Z score equals 2.250. Y (the probability that a household will take telephone service) is then calculated: $Y = 1/(1+e^{-z})$, which equals 90.5%. This means that, nationwide, households with incomes below 1.35 times the poverty guidelines have an 90.5% chance of having telephone service.

The second calculation is identical to the first, with one exception. Instead of using the mean value of SH135ORB, the mean is replaced by a 1. As discussed above, this would be the case if all states have a 1.35 PGC. Just as before, the coefficients (column a) are multiplied by the means (column d) to produce the new partial effect. Notice that for SH135ORB, the mean value of 0.18 was replaced with 1.00. The new partial effects are listed in column E. These partial effects are then summed to form the new Z score, which equals 2.396. This new Z score is then

used in the calculation as before: $Y = =1/(1+e^{-z})$. The new value for Y is 91.7%. This means that if all states adopted a 1.35 PGC, then 91.7% of households with incomes at or below 1.35 times the poverty guidelines would have telephone service. This represents a 1.2 percentage point increase (91.7% - 90.5%) in telephone subscription rates.

To determine the number of households in 2005 that would take phone service due to a 1.35 PGC, the difference in the Y's (1.2%) is multiplied by the number of households that are at or below 1.35 times the poverty guidelines. Projections made using the CPSH data indicate that in 2005, there will be 20,710,000 households at or below 1.35 times the poverty guidelines. Thus, multiplying 1.2% (which equals 0.012) times 20,710,000 households equals 249,000 households. Thus, the model indicates that 249,000 households would take telephone service due to a 1.35 PGC in 2005.

Restricted use of observations and variables

The logistic regression analyses uses only selected observations and variables for good reason. One reason is to address a specific policy proposal from the Joint Board. The Joint Board is recommending using a 1.35 PGC. In order to determine how such a plan would affect households at or below 1.35 times the poverty guidelines, only those households with incomes at or below 1.35 times the poverty guidelines are included in this analysis.[21] There are 13,828 usable observations.

The number of state specific variables that can be included in the analysis is limited because only 8 states have SH135ORB equal to one. Therefore, including additional state specific variables reduces the accuracy of the coefficient SH135ORB, the important policy variable used to quantify costs and benefits.

Discussion of variables in the specifications

Assumption that effects of a 1.33 PGC are indistinguishable from a 1.35 PGC

As mentioned earlier, this study assumes that the effects of a 1.33 PGC are statistically indistinguishable from a 1.35 PGC. Therefore, SH135ORB equals one for the states that have 1.33 or 1.50 PGCs. There is no alternative to measuring the effect of a 1.35 PGC because no states use a 1.35 PGC.

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[21] Alternatively, the sample could be restricted to households at or below 1.33 times the FPG because there are three states that have a 1.33 PGC. By including households at 1.34 and 1.35 times the FPG, we are implicitly assuming that those households are eligible for Lifeline even though they just miss qualifying for it. On the other hand, restricting the sample to households at or below 1.33 times the poverty line would exclude many more households from the sample in other states with a 1.50 PGC. It is not clear whether a 1.33 FPG restriction is better than a 1.35 FPG. Fortunately, the results are the same in either case. For both models, the coefficient on SH135ORB is virtually identical with either sample restriction.

Further, the fact that this analysis treats states with a 1.50 PGC the same as states with a 1.33 PGC is not problematic. This is because the households in the sample are restricted to those that are at or below 1.35 times the poverty guidelines. Thus, all the households in the sample will make the same economic choice whether the state in which they live has a 1.33 (or 1.35) or 1.50 PGC, because the households qualify for Lifeline under either criterion.

Inclusion of independent variables

As was done in the first staff study, HFOODSP was included because it captures the concept of "poverty" in a way that income alone does not. Participation in the Food Stamps Program is an indicator of special household needs.

CALIFORNIA-Unique Effects.

The CALIFORNI (California) variable was included as a separate variable in the regression model because it was included in the Lifeline Model. The results indicate that a household in California is more likely to take telephone service. The same variable was not significant when the analysis was performed on year 2000 data, so it is unclear why it is significant when using 2002 data.

The logistic regressions were run using the statistical computer program SPSS version 10. The regression analysis computer printouts are displayed below:

Logistic Regression

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected Cases	Included in Analysis	13828	100.0
	Missing Cases	0	.0
	Total	13828	100.0
Unselected Cases		0	.0
Total		13828	100.0

a. If weight is in effect, see classification table for the total number of cases.

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	617.340	14	000
	Block	617.340	14	000
	Model	617.340	14	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	9123.395	.044	.086

Classification Table[a]

			Predicted		
			H_TELHHD		Percentage
Observed			.00	1.00	Correct
Step 1	H_TELHHD	.00	1	1558	.1
		1 00	0	12269	100.0
	Overall Percentage				88.7

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	SH133ORB	.178692	.097	3.365	1	.067	1.196
	HTOTVAL	.000035	.000	69.991	1	.000	1.000
	MOBILEH	-.756729	089	71.653	1	.000	.469
	OWNHOME	.974900	068	203.709	1	.000	2 651
	PCTONEYR	463240	.064	51.652	1	.000	1.589
	HFOODSP	-.245187	.059	17.204	1	.000	.783
	SHMCAID	-.268743	144	3.477	1	.062	.764
	SHFOODSP	- 101100	140	.523	1	.470	.904
	SHAFDCH	.104803	060	3.031	1	.082	1.110
	SHENGAST	.159704	.089	3.191	1	.074	1.173
	SHPUBLIC	-.077088	.073	1.121	1	.290	.926
	SHHFLUNC	.019298	.175	.012	1	.912	1.019
	SHSSI	.060251	.102	.349	1	.555	1.062
	CALIFORN	.495371	.189	6.874	1	.009	1.641
	Constant	1.241	.130	90.623	1	.000	3.461

a. Variable(s) entered on step 1: SH133ORB, HTOTVAL, MOBILEH, OWNHOME, PCTONEYR, HFOODSP, SHMCAID, SHFOODSP, SHAFDCH, SHENGAST, SHPUBLIC, SHHFLUNC, SHSSI, CALIFORN.

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected Cases	Included in Analysis	13828	100.0
	Missing Cases	0	.0
	Total	13828	100.0
Unselected Cases		0	.0
Total		13828	100.0

a. If weight is in effect, see classification table for the total
   number of cases.

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	602.148	7	.000
	Block	602.148	7	.000
	Model	602.148	7	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	9138.587	.043	.084

Classification Table[a]

			Predicted		
			H_TELHHD		Percentage
Observed			.00	1.00	Correct
Step 1	H_TELHHD	.00	0	1559	.0
		1.00	0	12269	100.0
	Overall Percentage				88.7

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	SH133ORB	.161	.093	3.008	1	.083	1.175
	HTOTVAL	.000	.000	69.963	1	.000	1.000
	MOBILEH	-.783	.088	78.773	1	.000	.457
	OWNHOME	.962	.068	200.282	1	.000	2.617
	PCTONEYR	.476	.064	54.902	1	.000	1.610
	HFOODSP	-.254	.059	18.562	1	.000	.776
	CALIFORN	.658	.165	15.975	1	.000	1.931
	Constant	1.094	.072	231.366	1	.000	2.985

a. Variable(s) entered on step 1: SH133ORB, HTOTVAL, MOBILEH, OWNHOME,
   PCTONEYR, HFOODSP, CALIFORN.

STATEMENT OF
CHAIRMAN MICHAEL K. POWELL

Today's Order will help improve the ability of low-income consumers to make and receive basic telephone calls from their homes. If estimates prove correct, the expanded eligibility criteria we adopt today should make telephone service more affordable for approximately 1.17 to 1.29 million Americans – roughly 234,000 of whom will have never had basic telephone service before in their lives.

Since its inception, our Lifeline/Link-Up programs have made basic telephone service affordable to millions of low-income consumers. These support measures – though often extremely modest on an individual level – have improved people's lives by making everything from jobs, to healthcare to emergency services available to program participants. And while overall telephone penetration in the United States remains extremely high, too many people, particularly on tribal lands and in rural areas, forgo this essential connection.

By expanding federal default eligibility criteria and encouraging greater community outreach, today's Order improves the administration of the program. While this is an important step, we must remain vigilant to ensure that our statutory goals are met and that states utilize appropriate certification and verification requirements. In the future, the Commission must remain watchful for abuses of the self-certification rule and require underlying documentation where such abuse is demonstrated.

This item could not have been possible but for the diligence and insight of the federal and state members of the Joint Board. I am confident that we will soon see the fruits of your efforts in the form of greater access to basic telephone service across America.

STATEMENT OF
COMMISSIONER KATHLEEN Q. ABERNATHY

The Lifeline/Link-Up program, together with the Commission's other universal service support mechanisms, has helped ensure that the vast majority of Americans — nearly 95 percent — have access to telecommunications services at affordable rates. As successful as this program has been, however, there is room for improvement. Congress expressly directed the Commission to facilitate network access for low-income consumers, and an obvious way to promote that goal is to allow consumers to qualify for Lifeline and Link-Up support based on proof of low income. Our program-based eligibility standards remain useful, but the addition of an income-based standard should significantly improve our ability to target support to needy recipients.

While I support expansion of the eligibility criteria, I have also been a strong proponent of measures to prevent waste, fraud, and abuse. In particular, we must balance the desire to boost enrollment against the need to impose appropriate certification and verification requirements. Especially with respect to income-based eligibility, where self-certification can lend itself to abuse, we must require supporting documentation. I am confident that the requirements we impose in this Order will protect the integrity of the program, yet are sufficiently flexible to avoid placing undue burdens on program participants. We have also taken steps to ensure that consumers are removed from the Lifeline rolls once they are no longer eligible, while establishing safeguards to prevent benefits from being denied erroneously.

I appreciate the hard work of the Joint Board on Universal Service, which laid the groundwork for this Order.

STATEMENT OF
COMMISSIONER MICHAEL J. COPPS

Congress defined universal service as an "evolving level of telecommunications services." As times change, so must the Commission's efforts to ensure that all Americans have access to services at just, reasonable and affordable rates. True to statutory intent, today we adjust and recalibrate some of our policies to improve the effectiveness of our low-income support mechanism.

I support this action. I am pleased that for the first time we expand the federal default eligibility criteria to include income-based criterion. This should make it easier for households that no longer participate in qualifying assistance programs to participate in Lifeline and Link-Up. It also should make it simpler for households that are subject to the time limits associated with several federal public assistance programs under the Personal Responsibility and Work Opportunity Reconciliation Act.

The potential of our Lifeline and Link-Up programs is bound closely to the combined outreach efforts of carriers, states and the Commission. Only one-third of the households currently eligible for Lifeline and Link-Up assistance subscribe to these programs. Although we enjoy a national telephone penetration rate of just below 95 percent, some areas of this country— especially tribal lands—have penetration rates that are inexcusably lower. And we must never forget that there are households in this country without access to basic telephone service. We are bound by the statute to do more. The enhanced guidelines for outreach provided by the Order are a good first step. And I am pleased that the Further Notice of Proposed Rulemaking seeks comment on the need for additional outreach requirements that would further strengthen the Lifeline and Link-Up programs. At present, the Commission's rules require carriers to publicize the availability of these programs "in a manner reasonably designed to reach those likely to qualify for the service." I worry that such a broad requirement is difficult to monitor, hard to enforce and puts beyond the reach of publicity those who would benefit most from these programs.

The Joint Board's Recommendation underlies the critical changes we make today. I thank them for their hard work and valuable efforts to ensure that Lifeline and Link-Up continue to play a role in keeping America connected.

STATEMENT OF
COMMISSIONER KEVIN J. MARTIN

Today the Commission takes steps to update and improve the effectiveness of its low-income support mechanism. The Commission's statutory charge is to ensure that all Americans have access to quality services at just, reasonable and affordable rates. Because of policies like the Lifeline and Link-Up programs, today more than 95% of all U.S. households have basic telephone services. By expanding the Federal default eligibility criteria today, we make it easier for many households to participate and make support more easily available for thousands of Americans in need.

STATEMENT OF
COMMISSIONER JONATHAN S. ADELSTEIN

I am pleased to support this Order because it strengthens and enhances the Commission's Lifeline and Link-Up programs. Together, the Lifeline and Link-Up programs form the backbone of our efforts to promote universal telephone service for low-income consumers. By providing discounts on telephone installation and monthly telephone service to low-income consumers, the Lifeline and Link-Up programs have been instrumental in helping us achieve extraordinarily high levels of telephone penetration in the U.S. Overall, more than 95 percent of households in the U.S. have telephone service.

Indeed, for most of us, living without telephone service is almost unimaginable. Telephone service is considered a necessity for daily modern life. It is a link to our jobs, to commerce, to healthcare and emergency services, not to mention friends and family. Increasingly, telephone service is a baseline, upon which we are building a national communications infrastructure capable of supporting services that are transforming our economy and way of life.

Despite our progress, consumers in over 5 million U.S. households lack even the most basic connectivity. For many of these consumers, the cost of activating and maintaining telephone service is prohibitively expensive, keeping even the most basic connections out of reach. This is particularly so for low income consumers, who are much less likely to have access to telephone service. So, I am pleased that this order strikes at that gap by introducing for the first time federal income-based criteria for the Lifeline and Link-Up programs. This Order recognizes that poverty rates are increasing, while participation in many public assistance programs is decreasing. I hope that the income-based criteria that we adopt in this Order will allow our valuable programs to reach more of the consumers who truly need this assistance, and I look forward to exploring the broader criteria proposed in the attached Notice.

I am also pleased that this Order encourages states and carriers to do more to increase participation by eligible consumers. With less than half of all eligible households participating in these programs, it appears that many low income consumers are unaware that assistance is available to them. One significant step in this Order is the conclusion that we must do more to reach out to non-English speaking consumers. Through this approach, we recognize and foster the diversity of our communities.

I would like to thank the members of the Federal-State Joint Board on Universal Service for their contributions on this issue. Their recommendations form the basis for this decision. I would also like to recognize our colleagues in the state public utility commissions who continue to work hard to implement these programs as efficiently and effectively as possible. All of us benefit from their efforts and success.